Access DB# 73873

SEARCH REQUEST FORM

Scientific and Technical Information Center

uester's Full Name: Anthony Green Examiner # : 76551 Date: 8/21/02
Unit: 1745 Phone Number 308-3201 Serial Number: 10/004,486
l Box and Bldg/Room Location: 8B66 CP3 Results Format Preferred (circle): PAPER DISK E-MAIL

or than one search is submitted, please prioritize searches in order of need.

****

e provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched.
de the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or
' of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if
n. Please attach a copy of the cover sheet, pertinent claims, and abstract.

of Invention: Phosphonic Acid Derivative Treatment of Metallic Flakes

ıtors (please provide full names): H Taylor Lamborn; Robert E. Swerwine; Craig B. Keemer

est Priority Filing Date: 10/31/01

Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the riate serial number.

Please search attached claim.

****

F USE ONLY

	Type of Search		Vendors and cost where applicable	
ES				
hone #:	NA Sequence (#)		STN	$151.98
ocation:	AA Sequence (#)		Dialog	
her Picked Up:	Structure (#)	1 (2)	Questel/Orbit	
leted: 8-23-02	Bibliographic		Dr.Link	
rep & Review Time:	Litigation		Lexis/Nexis	
~~ep Time:~~	Fulltext		Sequence Systems	
e: 50	Patent Family		WWW/Internet	✓
	Other		Other (specify)	

0 (8-01)

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FILE 'REGISTRY' ENTERED AT 12:25:36 ON 23 AUG 2002
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STRUCTURE FILE UPDATES:   21 AUG 2002  HIGHEST RN 444646-89-3
DICTIONARY FILE UPDATES:  21 AUG 2002  HIGHEST RN 444646-89-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d his

     (FILE 'HOME' ENTERED AT 11:59:30 ON 23 AUG 2002)

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L1              STR
L2              STR L1

     FILE 'REGISTRY' ENTERED AT 12:15:53 ON 23 AUG 2002
L3              SCR 2127
L4            2 S L1 AND L2 AND L3
L5           50 S L1 AND L2 AND L3 FUL
                SAV L5 GRE486/A

     FILE 'CAOLD' ENTERED AT 12:21:09 ON 23 AUG 2002
L6            7 S L5

     FILE 'ZCAPLUS' ENTERED AT 12:21:26 ON 23 AUG 2002
L7           26 S L5

     FILE 'REGISTRY' ENTERED AT 12:25:36 ON 23 AUG 2002

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G1~PO3H2        Ak @5       Cb @8       Cb~Ak
 1   2                                 @11  12


VAR G1=5/8/11
NODE ATTRIBUTES:
CONNECT IS E1  RC AT   5
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CONNECT IS E1  RC AT   8
CONNECT IS E1  RC AT  12
DEFAULT MLEVEL IS ATOM
GGCAT   IS UNS  AT   8
GGCAT   IS UNS  AT  11
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M6 C  AT   5
ECOUNT  IS M6 C  AT   8

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   6

STEREO ATTRIBUTES: NONE
L2              STR
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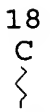


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G1~G2           Ak @5       Cb @8       Cb^Ak          N^^C       NH^C
 1   2                                  @11 12       @15   16     @19 20

VAR G1=5/8/11
VAR G2=NH2/15/19
NODE ATTRIBUTES:
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NSPEC   IS RC     AT  18
NSPEC   IS RC     AT  20
CONNECT IS E1  RC AT   5
CONNECT IS E1  RC AT   8
CONNECT IS E1  RC AT  12
DEFAULT MLEVEL IS ATOM
GGCAT   IS UNS  AT   8
GGCAT   IS UNS  AT  11
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M6 C  AT   5
ECOUNT  IS M6 C  AT   8

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
L3              SCR 2127
L5           50 SEA FILE=REGISTRY SSS FUL L1 AND L2 AND L3

100.0% PROCESSED  46340 ITERATIONS                    50 ANSWERS
SEARCH TIME: 00.00.08


=> file caold
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FILE 'CAOLD' ENTERED AT 12:25:47 ON 23 AUG 2002
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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

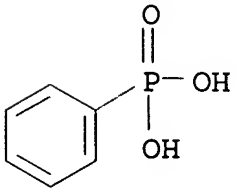
This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> d l6 1-7 all hitstr

L6 ANSWER 1 OF 7 CAOLD COPYRIGHT 2002 ACS
AN CA64:6680e CAOLD
TI phenylphosphonic chloride fluoride and fluorides of monoamides of phenylphosphonic acid
AU Ivanova, Zh. M.; Kirsanov, A. V.
IT 4762-45-2 4762-46-3 4762-47-4 4762-48-5 4762-49-6
4762-50-9
IT **4762-50-9**
RN 4762-50-9 CAOLD
CN Phosphonic acid, phenyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

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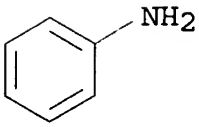
CMF C6 H7 N

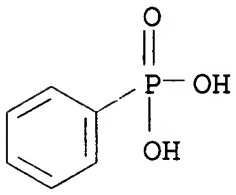


L6 ANSWER 2 OF 7 CAOLD COPYRIGHT 2002 ACS
AN CA59:657f CAOLD
TI acidolysis of monomeric and dimeric phenyldichlorophosphazoaryls
AU Zhmurova, I. N.; Kirsanov, A. V.
IT **4762-50-9** 77929-80-7 77929-81-8 91331-17-8 91394-57-9
91394-58-0 91395-47-0 91395-50-5 91492-92-1 91498-53-2
91762-18-4 91762-19-5 91961-64-7 91961-65-8 91961-81-8
92188-71-1 92424-12-9 92576-69-7 92849-42-8 93256-46-3
93256-57-6 93353-72-1 **95770-88-0** 96985-17-0 101037-17-6

IT **4762-50-9 95770-88-0**
RN 4762-50-9 CAOLD
CN Phosphonic acid, phenyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



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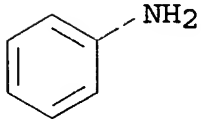
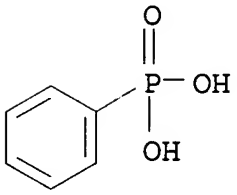


RN 95770-88-0 CAOLD

CN Phosphonic acid, phenyl-, compd. with p-toluidine (7CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

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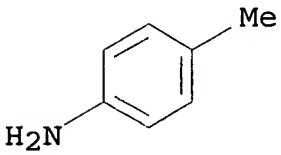
CMF C7 H9 N

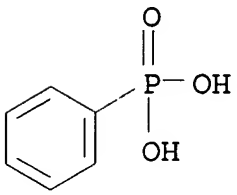


L6 ANSWER 3 OF 7 CAOLD COPYRIGHT 2002 ACS
AN CA58:9116b CAOLD
TI reactions of phosphine with ketones-route to primary phosphine oxides-prepn. and reaction of primary phosphine oxides
AU Buckler, Sheldon A.; Epstein, M.
IT 897-78-9 1439-41-4 3011-82-3 **4762-50-9** 10052-97-8
13081-73-7 15270-80-1 23377-94-8 **68668-96-2** 72564-44-4
74276-01-0 89600-09-9 89980-11-0 90795-86-1 91695-14-6
91773-68-1 92492-60-9 93227-57-7 93456-74-7 93532-05-9
94406-87-8 94582-76-0 94891-88-0 94891-89-1 95046-65-4
95591-20-1 96130-67-5 **96485-29-9** **96485-30-2**
96776-58-8 96954-94-8 97062-72-1 97192-41-1 97469-58-4
97809-25-1 97980-03-5 98691-54-4 98691-55-5 98964-00-2
98964-01-3 99269-81-5 99889-05-1 99998-27-3 100022-66-0
100148-63-8 100173-80-6 100213-11-4 100266-80-6 100407-95-2
100627-68-7 100686-33-7 100770-67-0 101014-53-3 106280-57-3
106404-85-7 106478-84-6 107421-84-1
IT **4762-50-9 68668-96-2 96485-29-9**
96485-30-2
RN 4762-50-9 CAOLD

CN Phosphonic acid, phenyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



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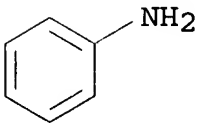

RN 68668-96-2 CAOLD
CN Phosphonic acid, octyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

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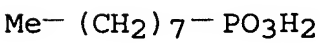
CRN 4724-48-5
CMF C8 H19 O3 P



CM 2

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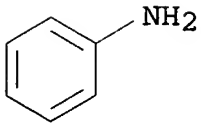

RN 96485-29-9 CAOLD
CN Phosphonic acid, (1-methylhexyl)-, compd. with PhNH2 (7CI) (CA INDEX NAME)

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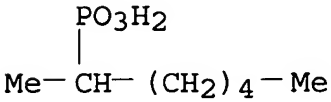

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CRN 62-53-3
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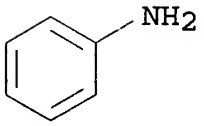

RN 96485-30-2 CAOLD
CN Phosphonic acid, (1-propylbutyl)-, compd. with PhNH2 (7CI) (CA INDEX NAME)

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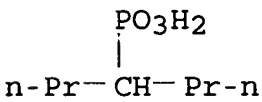
CMF C7 H17 O3 P



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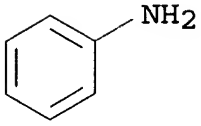
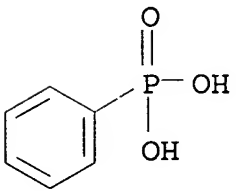
CMF C6 H7 N



L6 ANSWER 4 OF 7 CAOLD COPYRIGHT 2002 ACS
AN CA57:13795i CAOLD
TI phenyldichlorophosphazoaryls
AU Zhmurova, I. N.; Kirsanov, A. V.
IT 822-87-7 **4762-50-9** 5290-44-8 88117-16-2 91721-12-9
93002-90-5 93485-22-4 93506-18-4 94523-71-4 94972-28-8
94972-29-9 95195-67-8 95197-08-3 95197-14-1 95296-75-6
95296-76-7 95296-77-8 **95770-88-0** 95913-87-4 96485-76-6
96485-77-7 96485-78-8 101037-17-6 106304-63-6 106304-64-7
106628-97-1 106628-98-2
IT **4762-50-9 95770-88-0**
RN 4762-50-9 CAOLD
CN Phosphonic acid, phenyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



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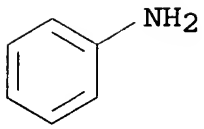

RN 95770-88-0 CAOLD
CN Phosphonic acid, phenyl-, compd. with p-toluidine (7CI) (CA INDEX NAME)

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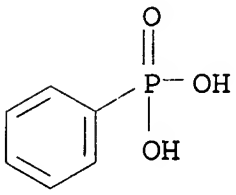
CRN 1571-33-1
CMF C6 H7 O3 P



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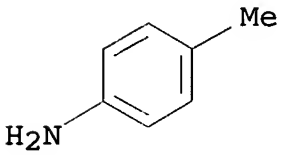

L6 ANSWER 5 OF 7 CAOLD COPYRIGHT 2002 ACS
AN CA56:14316h CAOLD
TI properties of the reaction product of cyclohexene with P and O
AU Walling, Cheves; Stacey, F. R.; Jamison, S. E.; Huyser, E. S.
IT 1825-63-4 18052-66-9 18146-00-4 18388-54-0 **88616-63-1**
91589-62-7 92063-78-0 101228-09-5 104442-78-6
IT **88616-63-1**
RN 88616-63-1 CAOLD
CN Phosphonic acid, 1-cyclohexen-1-yl-, compd. with aniline (7CI) (CA INDEX NAME)

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CRN 10562-88-6
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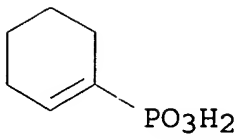

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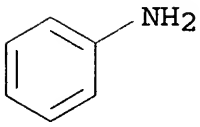


L6 ANSWER 6 OF 7 CAOLD COPYRIGHT 2002 ACS
AN CA54:20849e CAOLD
TI organophosphorus chemistry-addn. reactions of diethyl phosphonate and the oxidn. of triethyl phosphite
AU Kharasch, Morris S.; Mosher, R. A.; Bengelsdorf, I. S.
IT 674-90-8 1068-07-1 1127-41-9 1445-38-1 1648-71-1
1663-55-4 2180-42-9 2617-47-2 3084-40-0 4124-94-1
4724-48-5 6632-88-8 15336-73-9 15845-66-6 16165-71-2
17477-67-7 20188-02-7 26245-90-9 40568-81-8 50652-92-1
63694-18-8 **68668-96-2** 74038-47-4 81364-33-2 95688-55-4
99864-40-1 109438-09-7 114425-55-7
IT **68668-96-2**
RN 68668-96-2 CAOLD
CN Phosphonic acid, octyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

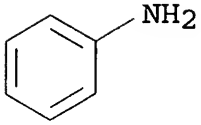
CM 1

CRN 4724-48-5
CMF C8 H19 O3 P

Me— $(CH_2)_7$ — PO_3H_2

CM 2

CRN 62-53-3
CMF C6 H7 N



L6 ANSWER 7 OF 7 CAOLD COPYRIGHT 2002 ACS
AN CA54:1424e CAOLD
TI 2-amino-5-chloro-4-tolylphosphonic acid
AU Whitehouse, Karl C.; Lecher, H. Z.
DT Patent
TI 2-amino-5-chloro-4-tolyphosphonic acid
PA American Cyanamid Co.
DT Patent

PATENT NO.	KIND	DATE
US 2894024		1959

IT 98546-74-8 101443-68-9 **110440-25-0** 111526-48-8
IT **110440-25-0**
RN 110440-25-0 CAOLD
CN Phosphonic acid, (2-amino-5-chloro-p-tolyl)-, compd. with Et3N (6CI) (CA INDEX NAME)

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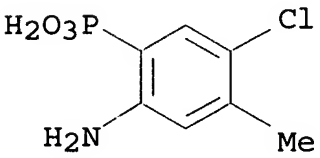

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CRN 121-44-8
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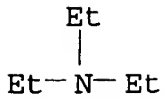

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FILE 'ZCAPLUS' ENTERED AT 12:26:22 ON 23 AUG 2002
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FILE COVERS 1907 - 23 Aug 2002 VOL 137 ISS 8
FILE LAST UPDATED: 21 Aug 2002 (20020821/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d l7 1-26 cbib abs hitstr hitrn

L7 ANSWER 1 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
2002:231360 Document No. 137:93800 Phenylphosphonic acid as a building block for two-dimensional hydrogen-bonded supramolecular arrays. Mahmoudkhani, Amir H.; Langer, Vratislav (Department of Chemistry, Goteborg University, Goteborg, SE-41296, Swed.). Journal of Molecular Structure, 609(1-3), 97-108 (English) 2002. CODEN: JMOSB4. ISSN: 0022-2860. Publisher: Elsevier Science B.V..
AB The potential use of org. P acids for the architecture of supramol. H bonded assemblies was demonstrated by the structural detn. of phenylphosphonic acid (1), anilinium phenylphosphonate (2), p-phenylazoanilinium phenylphosphonate (3), ethylenediammonium phenylphosphonate hydrate (4) and hexamethylenediammonium phenylphosphonate hydrate (5). Compds. 1, 2, 4 and 5 exhibit layered structures with two-dimensional networks of H bonds from

which the org. tails point out. Compd. 3 crystallizes as two concomitant polymorphs showing supramol. isomerism: a monoclinic phase (3a) with a layered structure and a triclinic phase (3b) in which H bonds form columns. In these assemblies, there are supramol. motifs such as chains and rings of H bonded moieties. H2O mols. are involved in the formation of H bonding networks for compds. 4 and 5. For compd. 5, hexamethylenediammonium ions link the adjacent sheets, forming a pillared-layered structure. The phosphonate groups can act as both donor and acceptor of H bonds. Anal. of the H bonds (P-)O-H.cntdot..cntdot..cntdot.O(-P) and N-H.cntdot..cntdot..cntdot.O(-P) reveals that they can be regarded as medium to strong H bonds.

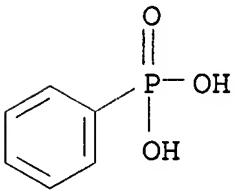
IT **4762-50-9P**, Anilinium hydrogen phenylphosphonate
(prepn. and crystal structure of)

RN 4762-50-9 ZCAPLUS

CN Phosphonic acid, phenyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

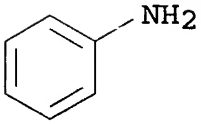
CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 62-53-3
CMF C6 H7 N



IT **4762-50-9P**, Anilinium hydrogen phenylphosphonate
(prepn. and crystal structure of)

L7 ANSWER 2 OF 26 ZCAPLUS COPYRIGHT 2002 ACS

2000:846929 Document No. 134:140864 Intercalation of .gamma.-zirconium phosphate benzenephosphonate by primary amines. Biswas, R. K.; Habib, M. A.; Ali, M. R. (Department of Applied Chemistry and

Chemical Technology, Rajshahi University, Rajshahi, 6205, Bangladesh). Indian Journal of Chemical Technology, 7(3), 137-141 (English) 2000. CODEN: ICHTEU. ISSN: 0971-457X. Publisher: National Institute of Science Communication, CSIR.

AB .gamma.-Zr phosphate benzenephosphonate [.gamma.-ZrPO4(H2PO4)0.33(C6H5PO2OH)0.67.2H2O (.gamma.-ZrPBP)] having a layered structure can be intercalated with primary amines (n-C3-C16). The compns. of the intercalates were detd. by the thermal anal. and N estn. The interlayer distances of the hydrated and anhyd. intercalates were detd. The interlayer distance of the anhyd. intercalates increases linearly with the no. of C atom in the primary amines but an odd-even effect is obsd.

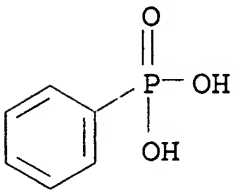
IT **215249-17-5DP**, solid soln. with zirconium phosphate amine hydrates **215249-21-1DP**, solid soln. with zirconium phosphate amine hydrates **215249-24-4DP**, solid soln. with zirconium phosphate amine hydrates **215249-25-5DP**, solid soln. with zirconium phosphate amine hydrates **321558-61-6DP**, solid soln. with zirconium phosphate amine hydrates **321558-63-8DP**, solid soln. with zirconium phosphate amine hydrates **321558-65-0DP**, solid soln. with zirconium phosphate amine hydrates **321558-67-2DP**, solid soln. with zirconium phosphate amine hydrates **321558-69-4DP**, solid soln. with zirconium phosphate amine hydrates **321558-74-1DP**, solid soln. with zirconium phosphate amine hydrates **321558-75-2DP**, solid soln. with zirconium phosphate amine hydrates
(prepn. and d-spacing)

RN 215249-17-5 ZCAPLUS

CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-hexanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

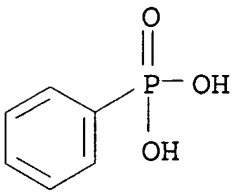
CRN 111-26-2
CMF C6 H15 N

$H_2N-(CH_2)_5-Me$

RN 215249-21-1 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-octanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

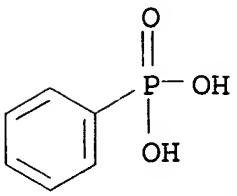
CRN 111-86-4
CMF C8 H19 N

$H_2N-(CH_2)_7-Me$

RN 215249-24-4 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-dodecanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 124-22-1
CMF C12 H27 N

$H_2N-(CH_2)_{11}-Me$

RN 215249-25-5 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-tetradecanamine (2:1:2), hydrate (9CI) (CA INDEX NAME)

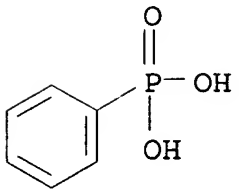
CM 1

CRN 2016-42-4
CMF C14 H31 N

$H_2N-(CH_2)_{13}-Me$

CM 2

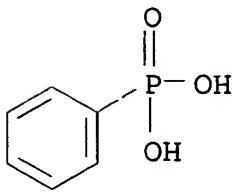
CRN 1571-33-1
CMF C6 H7 O3 P



RN 321558-61-6 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-heptanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

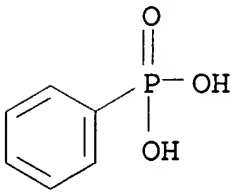
CRN 111-68-2
CMF C7 H17 N

$Me-(CH_2)_6-NH_2$

RN 321558-63-8 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-nonanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 112-20-9
CMF C9 H21 N

$Me-(CH_2)_8-NH_2$

RN 321558-65-0 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-decanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

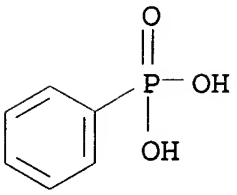
CM 1

CRN 2016-57-1
CMF C10 H23 N

$H_2N-(CH_2)_9-Me$

CM 2

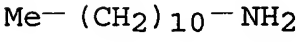
CRN 1571-33-1
CMF C6 H7 O3 P



RN 321558-67-2 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-undecanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

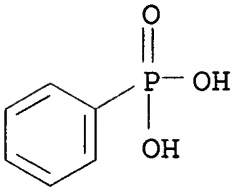
CM 1

CRN 7307-55-3
CMF C11 H25 N



CM 2

CRN 1571-33-1
CMF C6 H7 O3 P



RN 321558-69-4 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-tridecanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

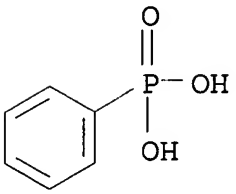
CM 1

CRN 2869-34-3
CMF C13 H29 N

Me— $(CH_2)_{12}$ — NH_2

CM 2

CRN 1571-33-1
CMF C6 H7 O3 P



RN 321558-74-1 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-pentadecanamine (2:1:2), hydrate (9CI) (CA INDEX NAME)

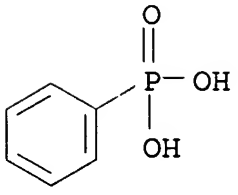
CM 1

CRN 2570-26-5
CMF C15 H33 N

Me— $(CH_2)_{14}$ — NH_2

CM 2

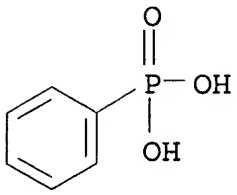
CRN 1571-33-1
CMF C6 H7 O3 P



RN 321558-75-2 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-hexadecanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 143-27-1
CMF C16 H35 N

$H_2N-(CH_2)_{15}-Me$

IT **215249-17-5DP**, solid soln. with zirconium phosphate amine hydrates **215249-21-1DP**, solid soln. with zirconium phosphate amine hydrates **215249-24-4DP**, solid soln. with zirconium phosphate amine hydrates **215249-25-5DP**, solid soln. with zirconium phosphate amine hydrates **321558-61-6DP**, solid soln. with zirconium phosphate amine hydrates **321558-63-8DP**, solid soln. with zirconium phosphate amine hydrates **321558-65-0DP**, solid soln. with zirconium phosphate amine hydrates **321558-67-2DP**, solid soln. with zirconium phosphate amine hydrates **321558-69-4DP**, solid soln. with zirconium phosphate amine hydrates **321558-74-1DP**, solid soln. with zirconium phosphate amine hydrates **321558-75-2DP**, solid soln. with zirconium phosphate amine hydrates
(prepn. and d-spacing)

L7 ANSWER 3 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
2000:122299 Document No. 132:245277 Preparation and adsorption characteristics of porous organic derivative of zirconium phosphate - An attempt of preparation of a functional nanoporous material. Kinomura, Nobukazu; Kumada, Nobuhiro; Suzuki, Takashi (Institute of Inorganic Synthesis, Faculty of Engineering, Yamanashi University, Yamanashi, 400-8511, Japan). Journal of the Society of Inorganic Materials, Japan, 284, 40-44 (Japanese) 2000. CODEN: JSIJFR. ISSN: 1345-3769. Publisher: Society of Inorganic Materials, Japan.
AB Solid solns. contg. aniline between Zr phenylphosphonate and Zr phosphate, Zr[(O3PPh)x(O3POH)2-x]yC6H5NH2.cntdot.nH2O, were prepd. under the hydrothermal conditions. Crystallinity and sp. surface area of the products were improved much by the addn. of aniline and

org. derivs. of Zr phosphate with sp. surface area >200 m2 g-1 were obtained. The products also have higher selectivity to O than that to N, unlike zeolites and active carbons.

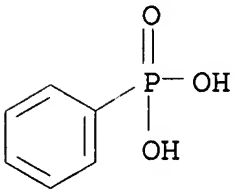
IT **261917-17-3DP**, solid solns. with phosphate analog (prepn. and surface area and crystallinity and adsorption of nitrogen and oxygen by)

RN 261917-17-3 ZCAPLUS

CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with benzenamine (2:1:?) (9CI) (CA INDEX NAME)

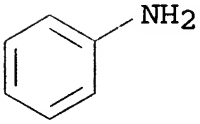
CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 62-53-3
CMF C6 H7 N

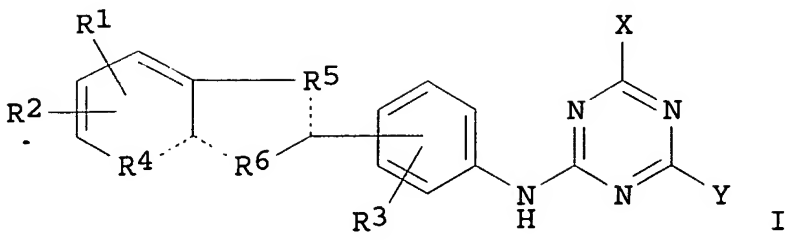


IT **261917-17-3DP**, solid solns. with phosphate analog (prepn. and surface area and crystallinity and adsorption of nitrogen and oxygen by)

L7 ANSWER 4 OF 26 ZCAPLUS COPYRIGHT 2002 ACS

1999:142374 Document No. 130:247038 Anilinotriazines, and telomerase inhibitors and pharmaceuticals containing them. Kitakawa, Masayuki; Masuda, Akira; Morita, Makoto; Suzuki, Masanobu; Sugihara, Hidemitsu (Nippon Kayaku Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11060573 A2 19990302 Heisei, 14 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-240260 19970822.

GI



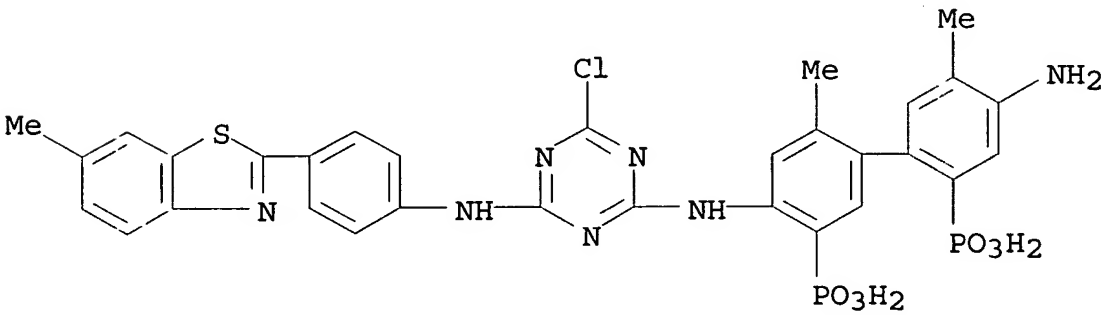
I

AB Pharmaceuticals, useful as anticancer agents, contain triazine derivs. such as I [R1-R3 = H, (substituted) C1-16 alkyl, (substituted) C1-10 alkoxy, halo, OH, sulfonic acid group, carboxylic acid group; R4-R6 = CH, CH2, O, S, N, (substituted) C1-10 alkylammonium; X, Y = H, halo, (substituted) amino, OH, (substituted) C1-10 alkoxy, (substituted) OPh; dotted line = single or double bond] or their salts as telomerase inhibitors. Cyanuric chloride was treated with 3-H2NC6H4SO3H and NaHCO3 in aq. Me2CO under ice-cooling for 30 min and treated with 2-(4-aminophenyl)-6-methylbenzothiazole/DMSO and NaHCO3 at room temp. for 15 h to give 56% 2-[4-[4-chloro-6-(3-sulfophenyl)amino-1,3,5-triazin-2-yl]aminophenyl]-6-methylbenzothiazole Na salt.

IT **221524-37-4P**
(prepn. of anilinotriazines as telomerase inhibitors)

RN 221524-37-4 ZCAPLUS

CN Phosphonic acid, [4-amino-4'-[[4-chloro-6-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-5,6'-dimethyl[1,1'-biphenyl]-2,3'-diyl]bis-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

IT **221524-37-4P**
(prepn. of anilinotriazines as telomerase inhibitors)

L7 ANSWER 5 OF 26 ZCAPLUS COPYRIGHT 2002 ACS

1998:657296 Document No. 129:339016 Intercalation of n-alkylamines and n-alkyldiamines into .gamma.-zirconium phenylphosphonate phosphate. Nakamura, Kayoko; Matsuyama, Kyoko; Tomita, Isao; Hasegawa, Yoshitsugu (Department of Chemistry, Ochanomizu University, Tokyo, Japan). Journal of Inclusion Phenomena and Molecular Recognition in Chemistry, 31(4), 351-355 (English) 1998. CODEN: JIMCEN. ISSN: 0923-0750. Publisher: Kluwer Academic Publishers.

AB Cryst. .gamma.-Zr phenylphosphonate phosphate was prepd. according to Yamanaka's method and the intercalation behavior of n-alkylamines and n-alkyldiamines were studied. In the case of n-alkylamines, a linear increase in interlayer distance was obsd. up to a C atom no. of 12, whereas in n-alkyldiamines, only two di-amines, ethylenediamine and propylenediamine, were intercalated with resp. increases in the interlayer distance. The increment of interlayer distance in both monoamines and diamines indicates the formation of a monomol. layer in the interlayer region of the host, in contrast to the case in .gamma.-Zr phosphate as a host.

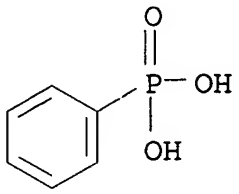
IT **215249-17-5DP**, solid soln. with zirconium phosphate analog
215249-19-7DP, solid soln. with zirconium phosphate analog
215249-21-1DP, solid soln. with zirconium phosphate analog
215249-23-3DP, solid soln. with zirconium phosphate analog
215249-24-4DP, solid soln. with zirconium phosphate analog
215249-25-5DP, solid soln. with zirconium phosphate analog
(prepn. of intercalated n-alkylamines and n-alkyldiamines into .gamma.-zirconium phenylphosphonate phosphate)

RN 215249-17-5 ZCAPLUS

CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-hexanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

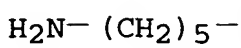
CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

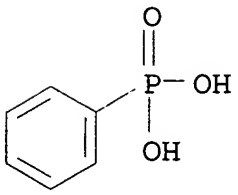
CRN 111-26-2
CMF C6 H15 N



RN 215249-19-7 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-heptanamine (2:1:1) (9CI) (CA INDEX NAME)

CM 1

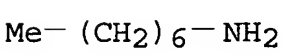
CRN 69031-88-5
CMF C6 H7 O3 P . 1/2 Zr



1/2 Zr(IV)

CM 2

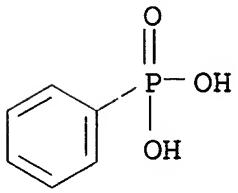
CRN 111-68-2
CMF C7 H17 N



RN 215249-21-1 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-octanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

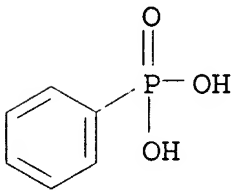
CRN 111-86-4
CMF C8 H19 N

$H_2N-(CH_2)_7-Me$

RN 215249-23-3 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-decanamine (2:1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 69031-88-5
CMF C6 H7 O3 P . 1/2 Zr



1/2 Zr(IV)

CM 2

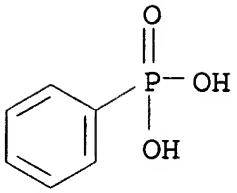
CRN 2016-57-1
CMF C10 H23 N

$H_2N-(CH_2)_9-Me$

RN 215249-24-4 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-dodecanamine (2:1:?), hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 124-22-1
CMF C12 H27 N

$H_2N-(CH_2)_{11}-Me$

RN 215249-25-5 ZCAPLUS
CN Phosphonic acid, phenyl-, zirconium(4+) salt, compd. with 1-tetradecanamine (2:1:2), hydrate (9CI) (CA INDEX NAME)

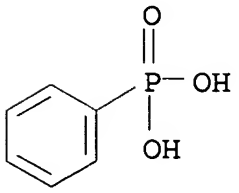
CM 1

CRN 2016-42-4
CMF C14 H31 N

$H_2N-(CH_2)_{13}-Me$

CM 2

CRN 1571-33-1
CMF C6 H7 O3 P



IT **215249-17-5DP**, solid soln. with zirconium phosphate analog
215249-19-7DP, solid soln. with zirconium phosphate analog
215249-21-1DP, solid soln. with zirconium phosphate analog
215249-23-3DP, solid soln. with zirconium phosphate analog
215249-24-4DP, solid soln. with zirconium phosphate analog

215249-25-5DP, solid soln. with zirconium phosphate analog (prepn. of intercalated n-alkylamines and n-alkyldiamines into .gamma.-zirconium phenylphosphonate phosphate)

L7 ANSWER 6 OF 26 ZCAPLUS COPYRIGHT 2002 ACS

1998:586665 Document No. 129:246891 The catanionic system dodecyltrimethylammonium hydroxide-n-dodecanephosphonic acid-water. Triangular phase diagram. Minardi, R. M.; Schulz, P. C.; Vuano, B. (Departamento Quimica Ingenieria Quimica, Universidad Nacional Sur, Bahia Blanca, 8000, Argent.). Colloid and Polymer Science, 276(7), 589-594 (English) 1998. CODEN: CPMSB6. ISSN: 0303-402X. Publisher: Dr. Dietrich Steinkopff Verlag GmbH & Co. KG.

AB The triangular phase diagram of the system dodecyltrimethylammonium hydroxide (DTAOH)-dodecanephosphonic acid (H2DP)-water was studied by several techniques. The DTAOH-rich zone could not be studied because DTAOH decompd. when it was dried. Pure H2DP only forms lamellar mesophases with water. The inclusion of DTAOH in the system produces the appearance of cubic and hexagonal mesophases. The gradual increase in DTAOH proportion lead to the gradual redn. in the existence of the lamellar mesophase domain, and increase of the hexagonal liq. crystal domain. At high DTAOH content, the lamellar mesophase disappeared. This behavior was explained by the gradual destruction of the hydrogen-bonded structure in the polar headgroup layer of liq. crystal aggregates. H2DP-rich anhyd. crystals were triclinic.

IT **213264-88-1**

(cell parameters of crystals of dodecyltrimethylammonium hydroxide-dodecanephosphonic acid 1:2 salt)

RN 213264-88-1 ZCAPLUS

CN 1-Dodecanaminium, N,N,N-trimethyl-, hydroxide, compd. with dodecylphosphonic acid (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 14898-63-6
CMF C15 H34 N . H O

$Me_3{}^+N-(CH_2)_{11}-Me$

O OH^-

CM 2

CRN 5137-70-2
CMF C12 H27 O3 P

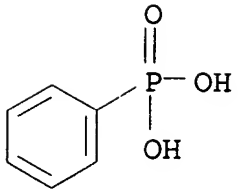
$H_2O_3P-(CH_2)_{11}-Me$

IT **213264-88-1**
(cell parameters of crystals of dodecyltrimethylammonium hydroxide-dodecanephosphonic acid 1:2 salt)

L7 ANSWER 7 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1998:240117 Document No. 128:217776 Spectroscopic, Structural and Transport Properties of Conductive Polyaniline Processed from Fluorinated Alcohols. Rannou, Patrice; Gawlicka, Anna; Berner, Detlef; Pron, Adam; Nechtschein, Maxime; Djurado, David (Laboratoire de Physique des Metaux Synthetiques UMR 585 (CEA-CNRS-University J. Fourier) Departement de Recherche Fondamentale sur la Matiere Condensee, CEA-Grenoble, Grenoble, 38 054, Fr.). Macromolecules, 31(9), 3007-3015 (English) 1998. CODEN: MAMOBX. ISSN: 0024-9297. Publisher: American Chemical Society.
AB Studies of PANI protonation in fluorinated alcs. are presented. Three solvents were tested, namely 1,1,1,3,3,3-hexafluoro-2-propanol (HFIP), 1,1,1,3,3,3-hexafluoro-2-phenyl-2-propanol (HFPP), and 1,1,1,3,3,3-hexafluoro-2-(p-tolyl)-propanol (HFTP). The degree of the broadening of the near-IR absorption, which can be considered as a measure of polaron delocalization, depends strongly on the selection of an appropriate protonating agent-solvent couple. Several couples, giving spectra similar to that reported for PANI(CSA)0.5 in m-cresol, were found. Processing of PANI from HFIP solns. leads to films with improved PANI chain stacking order as evidenced by X-ray diffraction studies. The films exhibit metallic type of cond. down to 200 K. The temp. dependence of the cond. over the whole temp. range studied was fitted using a combination of a metallic and hopping contribution in the frame of a heterogeneous disorder picture of PANI.
IT **204244-42-8**
(spectroscopic, structural and transport properties of conductive polyaniline processed from fluorinated alcs.)
RN 204244-42-8 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with benzenamine homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P

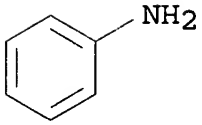


CM 2

CRN 25233-30-1
CMF (C6 H7 N)x
CCI PMS

CM 3

CRN 62-53-3
CMF C6 H7 N

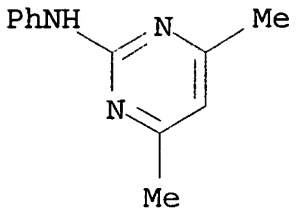


IT **204244-42-8**
(spectroscopic, structural and transport properties of conductive polyaniline processed from fluorinated alcs.)

L7 ANSWER 8 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1997:740076 Document No. 127:356182 Pyrimethanil fungicide salts. Stock, David; Briggs, Geoffrey Gower; Simpson, Donald James (Agrevo UK Limited, UK; Stock, David; Briggs, Geoffrey Gower; Simpson, Donald James). PCT Int. Appl. WO 9740682 A1 19971106, 12 pp. DESIGNATED STATES: W: AU, BG, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NZ, PL, RO, RU, TR, UA, US, VN; RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1997-GB1141 19970425. PRIORITY: GB 1996-8771 19960427.
AB Combining pyrimethanil with an org. acid having a volatility <2 Pa at 20.degree. results in a product which has valuable phys. and biol. properties, enhanced fungicidal activity and reduced phytotoxicity. Suitable salts are pyrimethanil oleate, pyrimethanil camphorsulfonate,.
IT **198629-75-3**
(fungicide)
RN 198629-75-3 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with 4,6-dimethyl-N-phenyl-2-pyrimidinamine (1:1) (9CI) (CA INDEX NAME)

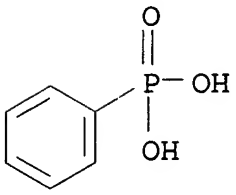
CM 1

CRN 53112-28-0
CMF C12 H13 N3



CM 2

CRN 1571-33-1
CMF C6 H7 O3 P



IT **198629-75-3**
(fungicide)

L7 ANSWER 9 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1995:294634 Document No. 123:171342 polyurethane composition containing aminodiol salts for use as a dispersing binder. Farkas, Julius; Hall, Dale R.; Kim, Kyung J.; Vedula, Ravi R. (B. F. Goodrich Co., USA). U.S. US 5371166 A 19941206, 11 pp. (English). CODEN: USXXAM. APPLICATION: US 1993-172008 19931222.

AB The binder gives magnetic dispersions having high gloss, and has good hydrolytic stability. The polyurethane comprises a polyol, a diisocyanate, a chain extender and an functional modifier formed of a reaction product of an aminodiol and Bronsted Acid. A polyurethane was prepd. from poly(tetramethylene adipate) glycol, 2-methyl-1,3-propanediol, and MDI in the presence of phenylphosphonic acid N-methyldiethanolamine salt.

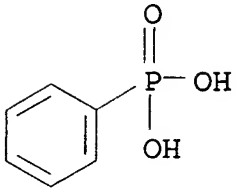
IT **163447-46-9**
(polyurethane compn. contg. aminodiol salts for use as a dispersing binder)

RN 163447-46-9 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with 2,2'-(phenylimino)bis[ethanol]

(1:1) (9CI) (CA INDEX NAME)

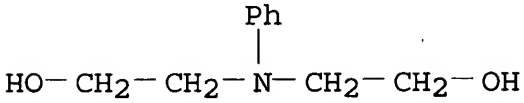
CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 120-07-0
CMF C10 H15 N O2



IT **163447-46-9**
(polyurethane compn. contg. aminodiol salts for use as a dispersing binder)

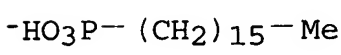
L7 ANSWER 10 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1993:610275 Document No. 119:210275 Disinfection composition for use in oral cavity. Oshino, Kazuhi; Yamagishi, Atsuhi; Nakai, Ryozo; Eguchi, Yasuteru; Iwasaki, Tetsuji; Hioki, Yuichi (Kao Corp., Japan). Eur. Pat. Appl. EP 555864 A1 19930818, 28 pp. DESIGNATED STATES: R: DE, FR, GB. (English). CODEN: EPXXDW. APPLICATION: EP 1993-102227 19930212. PRIORITY: JP 1992-26746 19920213; JP 1992-125998 19920519.

AB A compn. for disinfection of oral cavity comprises an antibacterial compd. Am+.cntdot.X-m (Am+=N-contg. antibacterial cation; X-= monoalkyl phosphate, monoalkenyl phosphate, C8-20 monoalkenyl phosphonate; m= valence of the cation A). The compn. provides a rapid and continued disinfection of oral cavity, while providing a good taste. The disinfection effect is not reduced in presence of surfactants and it does not color the tooth. A concd. mouthwash which can be used after dilg. .apprx.30 fold was prepd. contg. [Me(CH2)9N+Me(CH2)9MeMe]-OP(:O)OH-O(CH2)13Me 15.00, Na myristylphosphate 15.00, EtOH 20.00, Na saccharin 1.00, K2 glycyrrhizinate 0.50, polyoxyethylene hydrogenated castor oil 3.00, perfume 3.00, colorant q.s., and water q.s. to 100.00%.

IT **132806-05-4**
(disinfection oral compn. contg.)
RN 132806-05-4 ZCAPLUS
CN 1-Dodecanaminium, 2-hexyl-N,N,N-trimethyl-, hexadecylphosphonate (1:1) (9CI) (CA INDEX NAME)

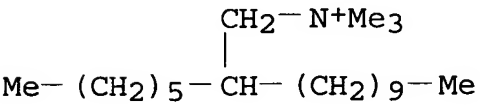
CM 1

CRN 132806-04-3
CMF C16 H34 O3 P



CM 2

CRN 132806-03-2
CMF C21 H46 N

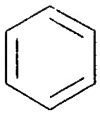


IT **132806-05-4**
(disinfection oral compn. contg.)

L7 ANSWER 11 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1992:601938 Document No. 117:201938 Presensitized lithographic printing plates. Imai, Masanori; Kawachi, Ikuo (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 04025844 A2 19920129 Heisei, 23 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-130855 19900521.
AB In the title lithog. plate comprising a photopolymerizable layer contg. an ethylene type polymerizable compd., photopolymn. initiator, and an alkali water-sol. or swellable film-formable polymer on its hydrophilic surface-bearing support, the above photosensitive layer contains a diazo resin contg. .gtoreq.1 P-contg. oxo-acid group. This lithog. plate shows high photosensitivity and is developable with an aq. alkali soln.
IT **144011-14-3P**
(prepn. and use of, photosensitive compn. contg., for lithog. plates)
RN 144011-14-3 ZCAPLUS
CN Benzenediazonium, 4-(phenylamino)-, polymer with formaldehyde and phenylphosphonic acid, salt with dodecylbenzenesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 1330-69-4
CMF C18 H29 O3 S
CCI IDS
CDES 8:ID



D1—SO_3^-

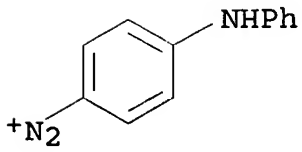
Me—$(CH_2)_{11}$—D1

CM 2

CRN 144011-13-2
CMF (C12 H10 N3 . C6 H7 O3 P . C H2 O)x
CCI PMS

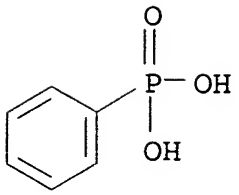
CM 3

CRN 16072-57-4
CMF C12 H10 N3



CM 4

CRN 1571-33-1
CMF C6 H7 O3 P



CM 5

CRN 50-00-0
CMF C H2 O

$H_2C{=}O$

IT **144011-14-3P**
(prepn. and use of, photosensitive compn. contg., for lithog. plates)

L7 ANSWER 12 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1991:149914 Document No. 114:149914 Skin or hair preparations containing quaternary ammonium salts as bactericides. Iwasaki, Tetsuharu; Hioki, Yuichi; Miyakai, Harue (Kao Corp., Japan). Jpn. Kokai Tokkyo Koho JP 02218605 A2 19900831 Heisei, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1989-39577 19890220.
AB Skin or hair prepns. contain [R1NR2R3R4]+ X- [.gtoreq.1 of R1, R2, and R3 = C8-30 linear or branched alkyl, alkenyl, and the others = Me, Et, PhCH2, 4-pyridinylmethyl, (CH2CH2O)nH, CH2(CHOH)4CH2OH; R4 = Me, Et, CH2CH2OH; X- = anion residue of phosphate ester, phosphonate ester, C.gtoreq.7 sulfonate ester, or sulfate ester, anionic (co)polymer (d.p. .gtoreq.3); n = 1-15] (I) as essential ingredients. The quaternary ammonium compds. do not irritate skin and have strong antobacterial effects. I [R1 = R4 = Me, R2 = PhCH2, R3 = C12H25, X = C16H33OP(O)(OH)O-] 2, hexadecyl phosphate triethanolmaine salt 4, polyoxyethylene sorbitan monooleate 2, and H2O 92 wt. parts were mixed to give a skin prepn.
IT **132806-05-4**
(cosmetic skin or hair prepns. contg., as bactericide)
RN 132806-05-4 ZCAPLUS
CN 1-Dodecanaminium, 2-hexyl-N,N,N-trimethyl-, hexadecylphosphonate (1:1) (9CI) (CA INDEX NAME)

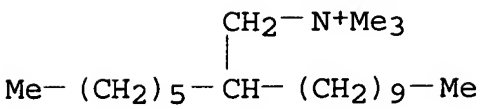
CM 1

CRN 132806-04-3
CMF C16 H34 O3 P

-$HO_3P-(CH_2)_{15}-Me$

CM 2

CRN 132806-03-2
CMF C21 H46 N

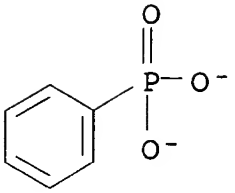


IT **132806-05-4**
(cosmetic skin or hair prepns. contg., as bactericide)

L7 ANSWER 13 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1990:551736 Document No. 113:151736 The partial orientation of the anilinium and benzenephosphonate ions in an amphiphilic nematic liquid crystal. Radley, K.; Tracey, A. S. (Dep. Chem., Simon Fraser Univ., Burnaby, BC, V5A 1S6, Can.). Mol. Cryst. Liq. Cryst., 182B, 177-84 (English) 1990. CODEN: MCLCA5. ISSN: 0026-8941.
AB Proton NMR spectroscopy was used to investigate the partial orientation of anilinium (I) and benzenephosphonate (II) in an amphiphilic nematic liq. crystal. The inclusion of I in a SDS phase sample can induce a change in the sign of the diamagnetic anisotropy from neg. to pos. Under similar conditions the inclusion II in a tetradecyltrimethylammonium bromide phase sample did not produce a change in the sign of the diamagnetic anisotropy. These differences are explained in terms of the greater soly. of II in the aq. region, which is born out by the degree of orientation measurements.
IT **84425-16-1**
(anion orientation in liq. crystal of, NMR study of)
RN 84425-16-1 ZCAPLUS
CN 1-Tetradecanaminium, N,N,N-trimethyl-, phenylphosphonate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 16486-11-6
CMF C6 H5 O3 P



CM 2

CRN 10182-92-0
CMF C17 H38 N

$Me_3{}^{+}N^{-}(CH_2)_{13}-Me$

IT **84425-16-1**
(anion orientation in liq. crystal of, NMR study of)

L7 ANSWER 14 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1989:597321 Document No. 111:197321 Aqueous fabric softening compositions based on acids and amines and/or quaternized amines. Rutzen, Horst; Sung, Eric (Henkel K.-G.a.A., Fed. Rep. Ger.). Eur. Pat. Appl. EP 316795 A2 19890524, 16 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL. (German). CODEN: EPXXDW. APPLICATION: EP 1988-118812 19881111. PRIORITY: DE 1987-3739143 19871119.

AB A title compn., suitable for addn. to laundered fabrics during rinsing, contain fabric softeners prepd. by mixing sulfonic and/or phosphonic acids with amines and/or quaternary ammonium compds. contg. a long-chain alkyl or alkenyl group. A compn. was prepd. by stirring 1 mol C16H33NMe2 with 1 mol MeO2CCHRSO3H (R = C10-16 alkyl) at 80.degree. and dispersing the product in water.

IT **123650-37-3**, 1-Tetradecanephosphonic acid hexadecyldimethylamine salt
(softening agents, for textiles, liq. compns. contg.)

RN 123650-37-3 ZCAPLUS
CN Phosphonic acid, tetradecyl-, compd. with N,N-dimethyl-1-hexadecanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 4671-75-4
CMF C14 H31 O3 P

$H_2O_3P-(CH_2)_{13}-Me$

CM 2

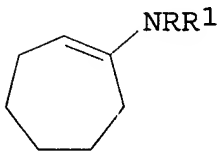
CRN 112-69-6
CMF C18 H39 N

$Me_2N-(CH_2)_{15}-Me$

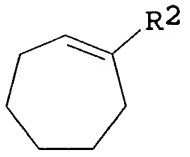
IT **123650-37-3**, 1-Tetradecanephosphonic acid hexadecyldimethylamine salt
(softening agents, for textiles, liq. compns. contg.)

L7 ANSWER 15 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1986:442388 Document No. 105:42388 Cycloheptenylamines as fungicides. Tomioka, Hiroki; Oishi, Tadashi; Takahashi, Junya; Sasaki, Mitsuru; Hirata, Naonori (Sumitomo Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 60248648 A2 19851209 Showa, 17 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1984-105160 19840523.

GI



I



II

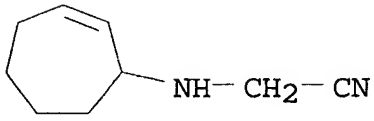
AB Antifungal cycloheptenylamines I [R, R1 = H, cycloalkyl, cycloalkenyl, lower alkynyl, aryl, alkyl (may be substituted by halogen, cyano, lower alkoxy, aryl, CO2H, lower alkoxycarbonyl, lower alkylcarbonyl); R and R1 may form an alkylene group optionally contg. O; R and R1 are not H or Me simultaneously] and their salts were prepd. by the reaction of RNHR1 with cycloheptene derivs. II [R2 = halo, lower alkylsulfonyloxy, (lower alkyl-substituted) benzenesulfonyloxy] or by the reaction of I (R1 = H) or I (R = H) with RX (X = reactive group) or R1X, resp. Thus, adding 1.67 g BrCH2CO2Et dropwise to a mixt. of 1.11 g 2-cycloheptenylamine, 1.01 g NEt3, and 10 mL CHCl3 at 0-5.degree. with stirring and refluxing the mixt. 3 h gave 1.28 g N-(2-cycloheptenyl)glycine Et ester I (R = H; R1 = CH2CO2Et), which was more effective against a radish pathogen, Fusarium oxysporum f. sp. raphani, than benomyl.

IT **103053-52-7P 103053-53-8P 103053-55-0P**
(prepn. of, as fungicide)

RN 103053-52-7 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with (2-cyclohepten-1-ylamino)acetonitrile (1:1) (9CI) (CA INDEX NAME)

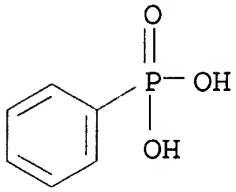
CM 1

CRN 95995-44-1
CMF C9 H14 N2



CM 2

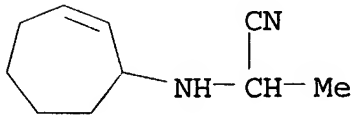
CRN 1571-33-1
CMF C6 H7 O3 P



RN 103053-53-8 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with 2-(2-cyclohepten-1-ylamino)propanenitrile (1:1) (9CI) (CA INDEX NAME)

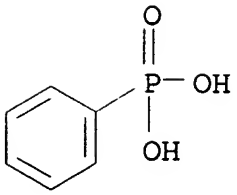
CM 1

CRN 95995-47-4
CMF C10 H16 N2



CM 2

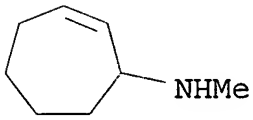
CRN 1571-33-1
CMF C6 H7 O3 P



RN 103053-55-0 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with N-methyl-2-cyclohepten-1-amine (1:1) (9CI) (CA INDEX NAME)

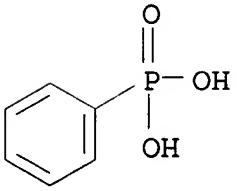
CM 1

CRN 95998-39-3
CMF C8 H15 N



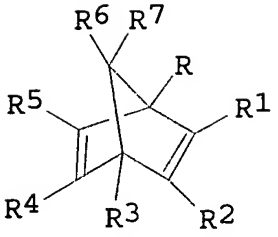
CM 2

CRN 1571-33-1
CMF C6 H7 O3 P

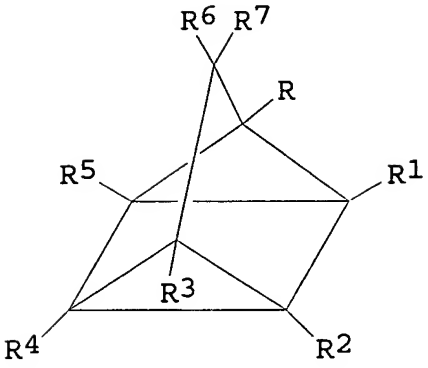


IT **103053-52-7P 103053-53-8P 103053-55-0P**
(prepn. of, as fungicide)

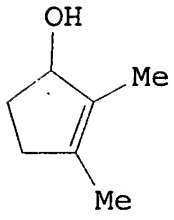
L7 ANSWER 16 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1985:615551 Document No. 103:215551 Water-soluble bicyclo[2.2.1]hepta-2,5-diene derivatives and their uses. (Dainippon Ink and Chemicals, Inc., Japan; Kawamura Physical and Chemical Research Institute). Jpn. Kokai Tokkyo Koho JP 60109592 A2 19850615 Showa, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1983-217571 19831118.
GI



I



II



III

AB The title derivs. (I; R, R3-7 = H, alkyl, aryl, but at least R4 or R5 = alkyl, aryl; R1 and/or R2 = phosphonic acid or phosphonate salts) and their photoisomers II were prepd. and used as energy converters between solar and heat energy. Thus, 12 mmol III was added to a suspension of 10 mmol (HO)2P(O)C.tplbond.CP(O)(OH)2 and 1.4 g MgSO4 in THF at 0-20.degree. followed by 29 mmol PhNH2 at room temp. to give 53.6% I. 2 PhNH2 [R = R3 = R6 = R7 = H, R1 = R2 = P(O)(OH)2, R1 = R5 = Me], which on UV irradn. gave the corresponding II deriv.

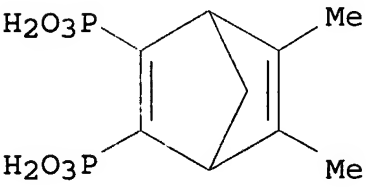
IT **99317-98-3P 99318-00-0P 99318-02-2P**
(prepn. and photoisomerization of, energy conversion in)

RN 99317-98-3 ZCAPLUS

CN Phosphonic acid, (5,6-dimethylbicyclo[2.2.1]hepta-2,5-diene-2,3-diyl)bis-, compd. with benzenamine (1:2) (9CI) (CA INDEX NAME)

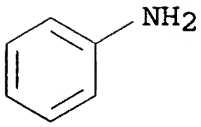
CM 1

CRN 99317-97-2
CMF C9 H14 O6 P2



CM 2

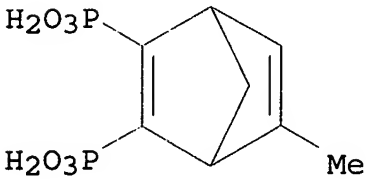
CRN 62-53-3
CMF C6 H7 N



RN 99318-00-0 ZCAPLUS
CN Phosphonic acid, (5-methylbicyclo[2.2.1]hepta-2,5-diene-2,3-diyl)bis-, compd. with benzenamine (1:2) (9CI) (CA INDEX NAME)

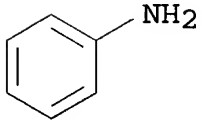
CM 1

CRN 99317-99-4
CMF C8 H12 O6 P2



CM 2

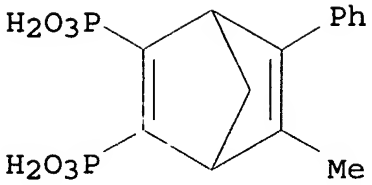
CRN 62-53-3
CMF C6 H7 N



RN 99318-02-2 ZCAPLUS
CN Phosphonic acid, (5-methyl-6-phenylbicyclo[2.2.1]hepta-2,5-diene-2,3-diyl)bis-, compd. with benzenamine (1:2) (9CI) (CA INDEX NAME)

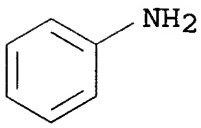
CM 1

CRN 99318-01-1
CMF C14 H16 O6 P2



CM 2

CRN 62-53-3
CMF C6 H7 N



IT **99317-98-3P 99318-00-0P 99318-02-2P**
(prepn. and photoisomerization of, energy conversion in)

L7 ANSWER 17 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1983:72872 Document No. 98:72872 Synthesis and degradation of polyurethanes containing phosphorus. Part II. Thermal degradation of poly(butylene phenylphosphonate) and poly(butylene phenylphosphonate) bis(phenylcarbamate). Grassie, Norman; Mackerron, Duncan H. (Dep. Chem., Univ. Glasgow, Glasgow, G12 8QQ, UK). Polym. Degrad. Stab., 5(1), 43-53 (English) 1983. CODEN: PDSTDW. ISSN: 0141-3910.

AB The principal characteristics and products of the thermal degrdn. of precursors for high-mol.-wt. P-contg. polyurethanes, such as hydroxy-terminated poly(butylene Ph phosphonate) (I) [26026-99-3] and poly(butylene phenylphosphonic) bis(phenylcarbamate) (II) [84579-19-1] were studied. The products from I were butadiene, THF, dihydrofuran, water, the cyclic ester of phenylphosphonic acid (III) and 1,4-butanediol (IV), III, and a linear diester of III and IV. The residue at 550.degree. incorporated pyrophosphonic acid links. All these products, as well as CO2 and PhNH2, were also formed from II. The products and characteristics of the reaction were accounted for in terms of accepted processes.

IT **84617-02-7**
(thermal degrdn. of, mechanism of)

RN 84617-02-7 ZCAPLUS
CN Phosphonic acid, phenyl-, polymer with 1,4-butanediol, bis(phenylcarbamate) (9CI) (CA INDEX NAME)

CM 1

CRN 501-82-6
CMF C7 H7 N O2

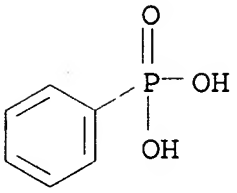
Ph— NH— CO_2H

CM 2

CRN 64652-39-7
CMF (C6 H7 O3 P . C4 H10 O2)x
CCI PMS

CM 3

CRN 1571-33-1
CMF C6 H7 O3 P



CM 4

CRN 110-63-4
CMF C4 H10 O2

HO— $(CH_2)_4$ — OH

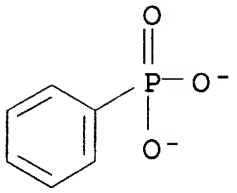
IT **84617-02-7**
(thermal degrdn. of, mechanism of)

L7 ANSWER 18 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1983:55096 Document No. 98:55096 Antistatic agents for synthetic polymers. (Takemoto Oil and Fat Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 57139131 A2 19820827 Showa, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1981-24788 19810221.
AB Ammonium compds. contg. phosphonic acid derivs. as counter ions, e.g., myristyltrimethylammonium Me phenylphosphonate (I) [84425-11-6], are used as antistatic agents. Thus, a sheet contg. 98 parts poly(Me methacrylate) [9011-14-7] and 2 parts I had good coloring properties, transparency, and surface resistance 6 .times. 109 .OMEGA., compared with >1014 for a sheet contg. no I.

IT **84425-16-1 84425-17-2**
(antistatic agents, for polymers)
RN 84425-16-1 ZCAPLUS
CN 1-Tetradecanaminium, N,N,N-trimethyl-, phenylphosphonate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 16486-11-6
CMF C6 H5 O3 P



CM 2

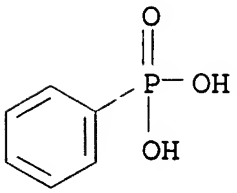
CRN 10182-92-0
CMF C17 H38 N

$Me_3{}^+N-(CH_2)_{13}-Me$

RN 84425-17-2 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with 2,2'-(dodecylimino)bis[ethanol] (1:2) (9CI) (CA INDEX NAME)

CM 1

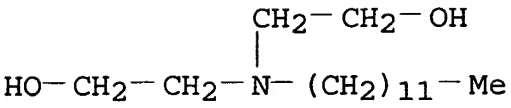
CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 1541-67-9

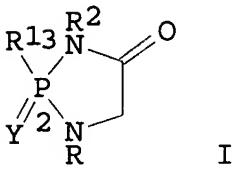
CMF C16 H35 N O2



IT **84425-16-1 84425-17-2**
(antistatic agents, for polymers)

L7 ANSWER 19 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1980:549284 Document No. 93:149284 Reactions of 2,4-dioxo- and 4-oxo-2-thioxo-1,3-diaza-2-phospholidines with different nucleophiles. Mulliez, M.; Wakselman, M. (Lab. Chim. Org. Biol., Univ. Paris-Sud, Orsay, 91405, Fr.). Phosphorus Sulfur, 8(1), 41-50 (French) 1980. CODEN: PREEDF. ISSN: 0308-664X.

GI



I

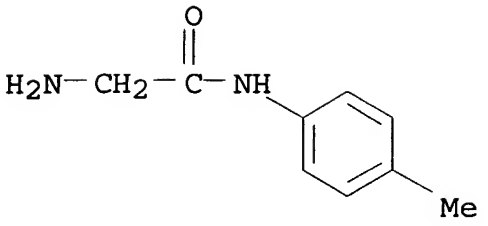
AB Nucleophilic ring-opening of I [R = H, R1 = Ph, R2 = C6H4Me, PhCH2, Y = O, S; R = Me(II), R1 = alkyl, aryl, aryloxy; R2 = alkyl, aryl; Y = O, S] occur with cleavage of the P(2)-N(3) bond. H2O rapidly give salts R1P(O)(O-)YH RN+H2CH2CONHR2 or R1P(O)(ONH3R)NMeCH2CONHR2; R4OH give R1P(Y)(OR4)NRCH2CONHR2. The rate of aminolysis is slow with I or negligible with II. An interpretation based on a general addn.-elimination mechanism and a particular elimination-addn. pathway in the case of the reaction of I with amines is proposed.

IT **74963-41-0P 74963-43-2P**
(prepn. of)

RN 74963-41-0 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with 2-amino-N-(4-methylphenyl)acetamide (1:1) (9CI) (CA INDEX NAME)

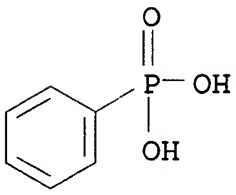
CM 1

CRN 64642-18-8
CMF C9 H12 N2 O



CM 2

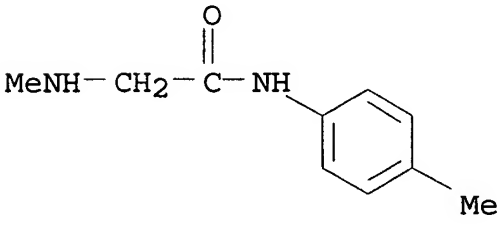
CRN 1571-33-1
CMF C6 H7 O3 P



RN 74963-43-2 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with 2-(methylamino)-N-(4-methylphenyl)acetamide (1:1) (9CI) (CA INDEX NAME)

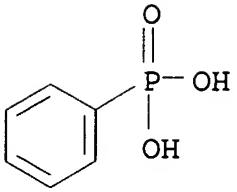
CM 1

CRN 64642-17-7
CMF C10 H14 N2 O



CM 2

CRN 1571-33-1
CMF C6 H7 O3 P



IT **74963-41-0P 74963-43-2P**
(prepn. of)

L7 ANSWER 20 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1979:38989 Document No. 90:38989 Derivatives of higher alkylphosphonic acids. Korol, O. I.; Irodionova, L. F.; Topalova, O. V.; Malovik, V. V.; Feshchenko, N. G. (Inst. Org. Khim., Kiev, USSR). Zh. Obshch. Khim., 48(9), 2021-5 (Russian) 1978. CODEN: ZOKHA4. ISSN: 0044-460X.
AB Some properties and reactions of the acids RP(O)(OH)2 (R = C6-10 alkyl) were investigated. Thus, treating C8H17P(O)(OH)2 with NaHCO3 in aq. EtOH with NaHCO3 gave 85% C8H17P(O)(OH)(ONa).
IT **68668-96-2P**
(prepn. of)
RN 68668-96-2 ZCAPLUS
CN Phosphonic acid, octyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

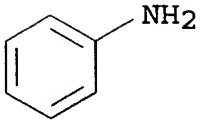
CM 1

CRN 4724-48-5
CMF C8 H19 O3 P

$Me-(CH_2)_7-PO_3H_2$

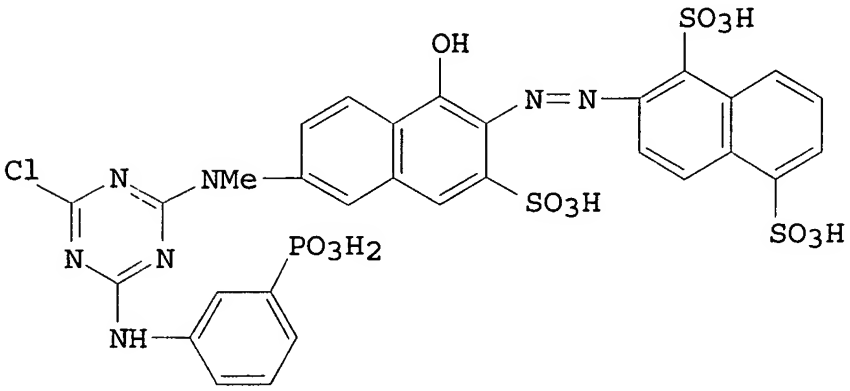
CM 2

CRN 62-53-3
CMF C6 H7 N



IT **68668-96-2P**
(prepn. of)

L7 ANSWER 21 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1977:56730 Document No. 86:56730 Dyes for cellulose-containing textiles. Plant, David W.; Williams, David John (Imperial Chemical Industries Ltd., UK). Ger. Offen. DE 2616683 19761028, 77 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1976-2616683 19760415.
GI



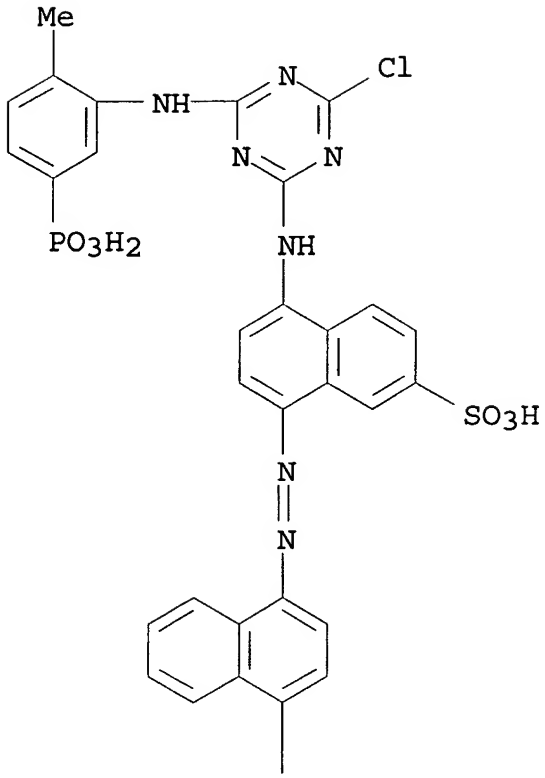
I

AB Fast dyes for cellulosic fibers are prepd. by bonding amino-substituted azo, anthraquinone, stilbene, or triphenodioxazine dyes through an s-triazine bridge to a group of general structure N(R)ZPO3H2, where R = H or alkyl and Z = alkylene or arylene; the triazine bridge also is substituted by a halo, amino, alkoxy, OH, or quaternary ammonium group. These dyes are applied (alone in the presence of disperse dyes) from acidic aq. media, followed by baking in the presence of cyanamide or dicyandiamide. A typical dye, the orange ammonium salt [61433-42-9] of I, was prepd. by successive reaction of cyanuric chloride [108-77-0] with 1,3,6,2-HO(HO3S)(MeNH)C10H4N:NC10H5(SO3H)-2,1,5 [61433-43-0] and m-H2NC6H4PO3H2 [5427-30-5] followed by treatment with NH4Cl.

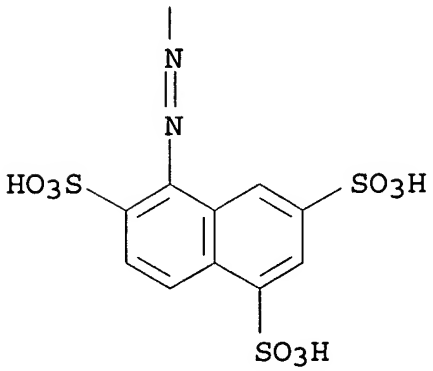
IT **61433-18-9 61433-19-0 61433-20-3 61433-21-4**
(dye, for cellulosic fibers, prepn. of)

RN 61433-18-9 ZCAPLUS
CN 1,3,6-Naphthalenetrisulfonic acid, 5-[[4-[[4-[[4-chloro-6-[(2-methyl-5-phosphonophenyl)amino]-1,3,5-triazin-2-yl]amino]-7-sulfo-1-naphthalenyl]azo]-1-naphthalenyl]azo]-, ammonium salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

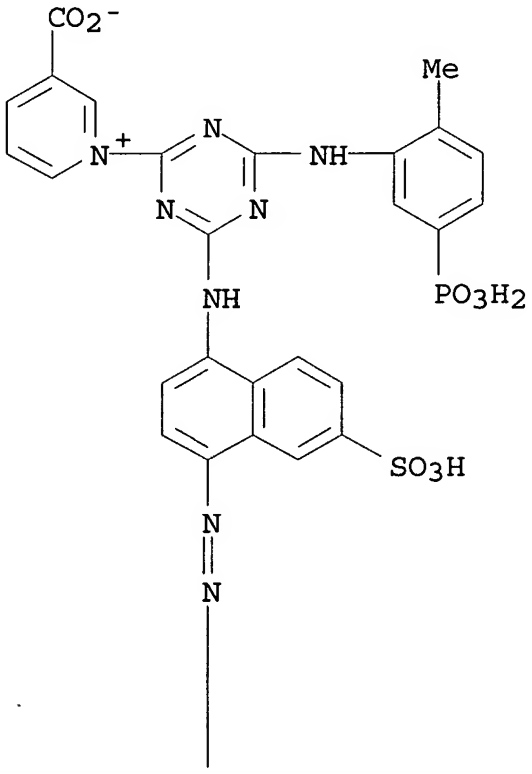


x NH_3

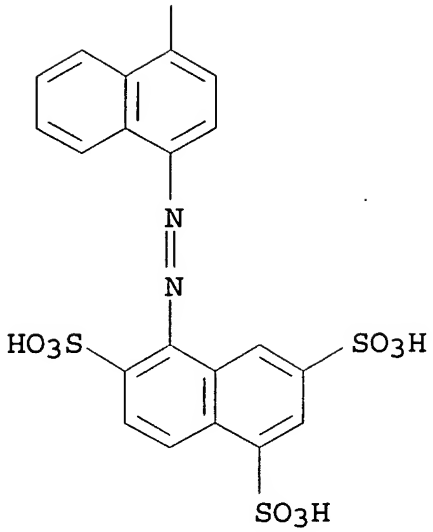
RN 61433-19-0 ZCAPLUS

CN Pyridinium, 3-carboxy-1-[4-[(2-methyl-5-phosphonophenyl)amino]-6-[[6-sulfo-4-[[4-[(2,5,7-trisulfo-1-naphthalenyl)azo]-1-naphthalenyl]azo]-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]-, inner salt, ammonium salt (9CI) (CA INDEX NAME)

PAGE 1-A



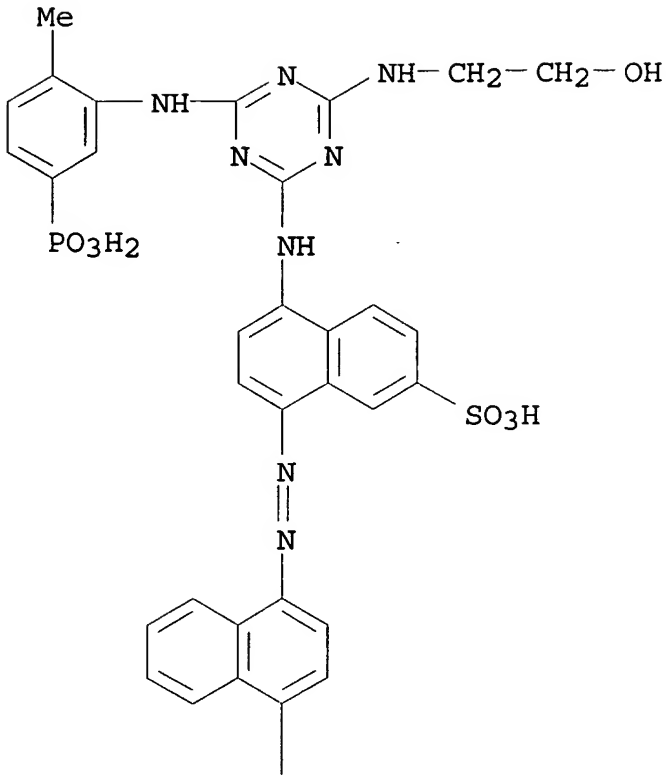
PAGE 2-A



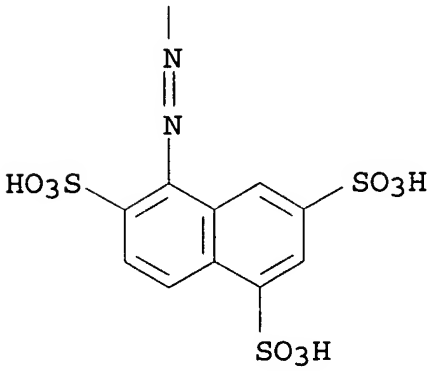
● x NH_3

RN 61433-20-3 ZCAPLUS
CN 1,3,6-Naphthalenetrisulfonic acid, 5-[[4-[[4-[[4-[(2-hydroxyethyl)amino]-6-[(2-methyl-5-phosphonophenyl)amino]-1,3,5-triazin-2-yl]amino]-7-sulfo-1-naphthalenyl]azo]-1-naphthalenyl]azo]-, ammonium salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

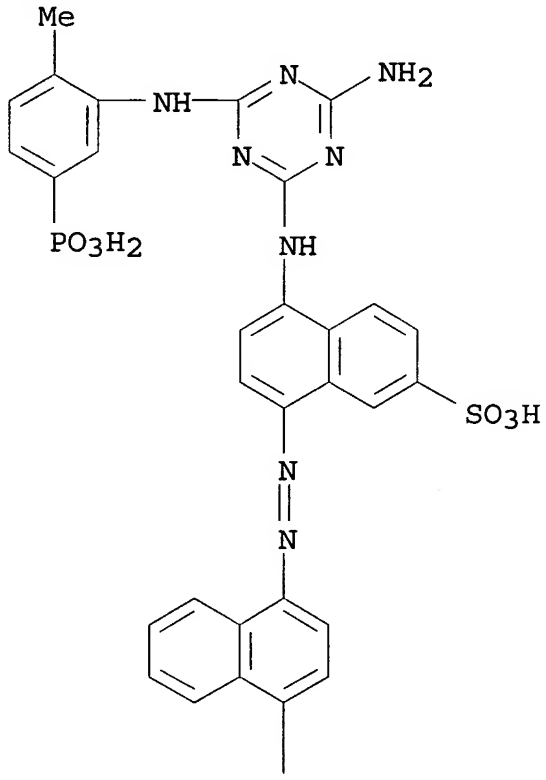


x NH_3

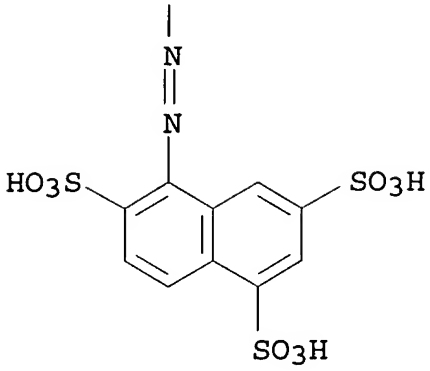
RN 61433-21-4 ZCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid, 5-[[4-[[4-[[4-amino-6-[(2-methyl-5-phosphonophenyl)amino]-1,3,5-triazin-2-yl]amino]-7-sulfo-1-naphthalenyl]azo]-1-naphthalenyl]azo]-, ammonium salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



● x NH_3

IT **61433-18-9 61433-19-0 61433-20-3**
61433-21-4
(dye, for cellulosic fibers, prepn. of)

L7 ANSWER 22 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1976:405792 Document No. 85:5792 Hydrolysis of .beta.-chloroalkylthionophosphonic and alk-1-enylthionophosphonic acid dichlorides. Fedorova, G. K.; Anan'eva, L. G. (Inst. Org. Khim., Kiev, USSR). Zh. Obshch. Khim., 46(3), 549-52 (Russian) 1976. CODEN: ZOKHA4.
AB Hydrolysis of RCHClCH2PSCl2 (R = Bu, pentyl) with 6N HCl by refluxing for 6 hr gave a 2:1 mixt. of RCH(OH)CH2PS(OH)2 and RCHClCH2PO(OH)2. Similar hydrolysis of Me(CH2)4CH:CHPSCl2 gave only Me(CH2)4CH:CHPO(OH)2.
IT **41913-26-2P**
(prepn. of)
RN 41913-26-2 ZCAPLUS
CN Phosphonic acid, 1-heptenyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

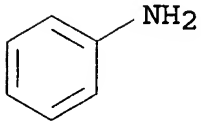
CM 1

CRN 41913-25-1
CMF C7 H15 O3 P

$Me-(CH_2)_4-CH=CH-PO_3H_2$

CM 2

CRN 62-53-3
CMF C6 H7 N

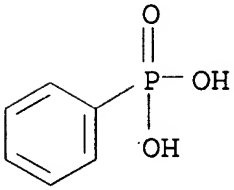


IT **41913-26-2P**
(prepn. of)

L7 ANSWER 23 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1975:31391 Document No. 82:31391 Amine salts of organophosphorus acids. Harris, Frederick John; Brown, Hugo Lambie; Hobson, David L.; Eckersall, Richard N. (Scottish Agricultural Industries Ltd.). Brit. GB 1366600 19740911, 5 pp. Division of Brit. 1,347,009. (English). CODEN: BRXXAA. APPLICATION: GB 1973-32260 19711116.
AB Aliph. monobasic amine salts of p-RC6H4(CH2)nPO3H2 (I, R = H, n = 0-4; R = Cl, n = 1) and [Me(CH2)7]2PO2H, useful as plant growth modifiers (no data), were prepd. Thus, refluxing p-ClC6H4-CH2Cl with (EtO)3P and subsequent hydrolysis gave I (R = Cl, n = 1). The acid with aq. Me2NH gave its bis(dimethylammonium) salt.
IT **54553-20-7P**
(prepn. of)
RN 54553-20-7 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with N-octadecyl-1-octadecanamine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 112-99-2
CMF C36 H75 N

Me—$(CH_2)_{17}$—NH—$(CH_2)_{17}$—Me

IT **54553-20-7P**
(prepn. of)

L7 ANSWER 24 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1973:442619 Document No. 79:42619 Derivatives of .beta.-chloroalkyl- and alken-1-ylphosphonic and thiophosphonic acids. Fedorova, G. K.; Anan'eva, L. G.; Kononenko, I. M.; Maksyutina, L. I.; Kirsanov, A. V. (USSR). Zh. Obshch. Khim., 43(3), 538-43 (Russian) 1973. CODEN: ZOKHA4.

AB Heating 2-chloroalkylphosphonic acids with Na in octane gave mono-Na salts which in aq. soln. cleaved at the C-P bond. Treating 2-chloroalkylphosphonothioic dichlorides with alcs. in the presence of CH2:CHCN gave the corresponding diesters, but treating with RONa gave diesters of 1-alkenylphosphonothioic acids. Aliphatic amines gave diamides of alkenylphosphonic acids from 2-haloalkylphosphonic dichlorides, whereas arom. amines gave diamides of t the 2-chloroalkylphosphonic acids. Et3N dehydrohalogenated 2-chloroalkylphosphonic or -phosphonothioic dichlorides. RCHClCH2P(S)Cl2, RCH:CHP(S)Cl2 and RCH:CHP(O)Cl2 were described (R = Bu, pentyl). Esters contg. Me, Et, Pr, Bu, iso-Bu, Ph were described, together with anilides, .omicron.- and p-toluidides.

IT **41913-26-2P 41913-49-9P**
(prepn. of)

RN 41913-26-2 ZCAPLUS

CN Phosphonic acid, 1-heptenyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

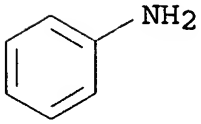
CM 1

CRN 41913-25-1
CMF C7 H15 O3 P

Me—$(CH_2)_4$—CH═CH—PO_3H_2

CM 2

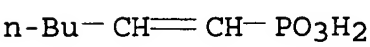
CRN 62-53-3
CMF C6 H7 N



RN 41913-49-9 ZCAPLUS
CN Phosphonic acid, 1-hexenyl-, compd. with benzenamine (1:1) (9CI) (CA INDEX NAME)

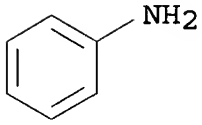
CM 1

CRN 25420-22-8
CMF C6 H13 O3 P



CM 2

CRN 62-53-3
CMF C6 H7 N

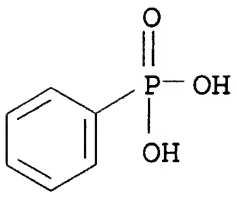


IT **41913-26-2P 41913-49-9P**
(prepn. of)

L7 ANSWER 25 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1973:29990 Document No. 78:29990 Plant growth stimuulating ammonium phosphonates. Harris, Frederick John; Brown, Hugo Lambie; Hobson, David Leslie; Eckersall, Richard Norman (Scottish Agricultural Industries Ltd.). Ger. Offen. DE 2162300 19720928, 34 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1971-2162300 19711215.
AB Eleven title salts R2NR1.0.5R2PO3H2 (I; R2NR1 = Me2NH, Et3N, H2NCH2CH2OH, H2NPh, H2NC18H37-n; R2 = p-ClC6H4, Ph(CH2)n, n = 0, 1, 2, 3, 4) were prepd. by reaction of R2NR1 with R2PO3H2, which was obtained from R2Cl and Et3PO3 via R2P(O)(OEt)2 or by hydrolysis of R2PCl2 with HNO3. Me2NH.(n-C8H17)2PO2H (II) was prepd. by reaction of CH2:CHC6H13 with Na3PO2 and Me3COOCMe3 and subsequently with Me2NH. I and II were used as plant growth stimulating agents, which increase, e.g., the grain yield of corn and barley as much as 26.2% over that of controls without I or II.
IT **39225-11-1P**
(prepn. of)
RN 39225-11-1 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with 1-octadecanamine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 124-30-1
CMF C18 H39 N

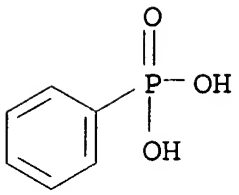
$H_2N-(CH_2)_{17}-Me$

IT **39225-11-1P**
(prepn. of)

L7 ANSWER 26 OF 26 ZCAPLUS COPYRIGHT 2002 ACS
1973:29913 Document No. 78:29913 Reaction of polyhalomethanes with trivalent-phosphorus acids and their partial esters. Erre, E. A.; Kharrasova, F. M.; Shafigullina, R. D. (USSR). Tr. Kazan. Khim-Tekhnol. Inst., No. 46, 70-8 From: Ref. Zh., Khim. 1972, Abstr. No. 3Zh507 (Russian) 1971.
AB Reaction of RR1P(O)H (I) with polyhalomethanes gave RR1P(O)OH (II), isolated as [RR1P(O)O-][HQ]+ (III) [R and R1, polyhalomethane, reaction time (hr) and temp., % yield II, and Q in III given]: Ph, OH, CCl4, 11, 85.degree., 50, Et2NH; Ph, OH, CCl4, 22, 125.degree. (in dioxane), 86.8, (C6H13)2NH; p-tolyl, OH, CCl4, 22, 120.degree. (in dioxane), 48, 5, Pr2NH; p-BrC6H4, OH, CBrCl3, 10, 120.degree., 77.7, Et2NH; p-ClC6H4, OH, CBrCl3, 10, 80.degree. (in C6H6), 12.0, C6H11NH2; PhCH2, PhCH2, CCl4, 6, 100.degree., 70, -; and Bu, Bu, CCl4, 2.5, 80.degree. (in C6H6), 83.4, (C6H11)2NH.
IT **39238-90-9P**
(prepn. of)
RN 39238-90-9 ZCAPLUS
CN Phosphonic acid, phenyl-, compd. with N-hexyl-1-hexanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 1571-33-1
CMF C6 H7 O3 P



CM 2

CRN 143-16-8
CMF C12 H27 N

$Me-(CH_2)_5-NH-(CH_2)_5-Me$

IT **39238-90-9P**
(prepn. of)